

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A process for the functionalisation of polyolefins selected from the group consisting of:

- ethylene/propylene copolymers (EPM) with a molar propylene content ranging from 16% to 50%, and an Mw ranging from 10,000 to 200,000; and
- ethylene/propylene/non-conjugated diolefin (EPDM) terpolymers with a molar ethylene content ranging from 40 to 85%, from 15 to 70% of propylene and 2 to 10% molar of non-conjugated diene, the molecular weights Mw of the EPDM being within the range from 75,000 to 450,000;

which ~~comprise~~ comprises the treatment under shear conditions higher than 100 sec^{-1} , with a polar unsaturated monomer selected from the group consisting of maleic anhydride and its ~~derivatives~~ its esters, amides, acid and metallic salt, in the presence of at least one hydroperoxide as radicalic initiator, the concentration of hydroperoxide with respect to the polyolefins ranging from 0.1 to 20% by weight.

Claim 2 (Original): The process according to claim 1, wherein the shear conditions are higher than 1000 sec^{-1} .

Claim 3 (Currently Amended): The process according to claim 1, wherein the ethylene/propylene (EPM) copolymers are present and have a molar propylene content ranging from 20% to 45%.

Claim 4 (Currently Amended): The process according to claim 1, wherein the ethylene/propylene/non-conjugated diolefin (EPDM) terpolymers are present and have a

molar ethylene content ranging from 40 to 70%, from 30 to 60% of propylene and from 0.5 to 20% of non-conjugated diene.

Claim 5 (Original): The process according to claim 4, wherein the ethylene/propylene/non-conjugated diolefin (EPDM) terpolymers have a molar content of non-conjugated diene ranging from 1 to 15% molar.

Claim 6 (Original): The process according to claim 5, wherein the ethylene/propylene/non-conjugated diolefin (EPDM) terpolymers have a molar content of non-conjugated diene ranging from 2 to 10% molar.

Claim 7 (Original): The process according to claim 4, wherein the ethylene/propylene/non-conjugated diolefin (EPDM) terpolymers have a molecular weight Mw ranging from 100,000 to 180,000.

Claim 8 (Currently Amended): The process according to claim 1, wherein the ethylene/propylene/non-conjugated diolefin (EPDM) terpolymers are present and the non-conjugated diolefins are selected from the group consisting of 1,4-hexadiene, 1,5-heptadiene, 1,6-octadiene, 1,4-cyclohexadiene, 5-methylene-2-norbornene, and 5-ethylidene-2-norbornene.

Claim 9 (Original): The process according to claim 8, wherein the non-conjugated diolefin is 5-ethylidene-2-norbornene.

Claim 10 (Currently Amended): The process according to claim 1, wherein the hydroperoxide is selected from the group consisting of cumene hydroperoxide, hydrogen peroxide, t-butyl hydroperoxide, and 2,5-dihydroperoxy-2,5-dimethyl hexane.

Claim 11 (Original): The process according to claim 1, wherein the concentration of hydroperoxide with respect to the polyolefins ranges from 0.2 to 10% by weight.

Claim 12 (Original): The process according to claim 11, wherein the concentration of hydroperoxide with respect to the polyolefins ranges from 0.5% to 5% by weight.

Claim 13 (Original): The process according to claim 1, wherein the quantity of polar unsaturated monomers ranges from 0.1 to 10% with respect to the polyolefins.

Claim 14 (Original): The process according to claim 13, wherein the quantity of polar unsaturated monomers ranges from 0.4 to 1.5% with respect to the polyolefins.

Claim 15 (Original): The process according to claim 1, carried out at a temperature ranging from 80 to 250°C, for a time ranging from 1 to 1800 seconds.

Claim 16 (Original): The process according to claim 15, wherein the temperature ranges from 140 to 200°C and the time ranges from 30 to 600 seconds.

Claim 17 (New): The process according to claim 1, wherein the polar unsaturated monomer is maleic anhydride.